

REMARKS

This is a full and timely response to the non-final Office action mailed March 30, 2007. Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 1-30 are pending in this application, with Claims 1, 10, 19, 22, 25, and 33 being the independent claims. Claims 1, 4, 10, 16, 19, and 22 have been amended, and Claims 6-9 and 25-39 have been withdrawn. No new matter is believed to have been added.

Elections/Restrictions

The Office Action identifies three allegedly distinct inventions as follows:

Group I – claims 1-5 and 10-24;

Group II – claims 6-9; and

Group III – claims 25-39.

In response, Applicants, through their representatives and attorneys, hereby elect Group I (e.g., Claims 1-5 and 10-24) without traverse.

Rejections Under 35 U.S.C. § 102

Claims 1 and 4 are rejected under 35 U.S.C. § 102 as allegedly being anticipated by U.S. Patent No. 3,205,565 to McDonald (“McDonald”). This rejection is respectfully traversed.

Claim 1 has been amended and now recites, *inter alia*, applying a paste to a surface of a substrate, wherein the paste comprises a precursor material comprising at least an organic component and at least an inorganic bonding component, and the inorganic bonding component comprises a eutectic mixture.

McDonald teaches a composite metal member that includes a solidly sintered bearing layer which is coextensively bonded to and overlays an intermediate layer and is formed of a metal powder mixture of a matrix material whose free energy of oxide formation is more positive than lead oxide and in which the powder particles of predominantly lead oxide form independent and discontinuous lakes which are embedded in the matrix material. See col. 3, lines 7-15.

However, nowhere does McDonald mention or suggest a paste that includes a precursor material including at least an organic component and at least an inorganic bonding component, where the inorganic bonding component includes a eutectic mixture, as recited in claim 1.

Accordingly, as McDonald does not teach each and every element of claim 1, and hence of claim 4 that depends therefrom, the Applicants respectfully request withdrawal of these rejections.

Claims 10, 14, and 22 are rejected under 35 U.S.C. § 102 as allegedly being anticipated by U.S. Patent No. 3,368,970, referred to in the office action as “Henricks”; however, as noted in the Examiner’s Notice of References Cited, Henricks is U.S. Pat. No. RE 24,017 (“Henricks”). This rejection is respectfully traversed.

Claim 10 has been amended and recites, *inter alia*, applying a paste comprising a precursor material to a substrate surface, the precursor material comprising a plurality of inorganic components and an organic polymer binder, where the plurality of inorganic components includes at least one bonding component comprising a eutectic mixture. Claim 22 has also been amended and recites, *inter alia*, applying a paste comprising a first precursor material to a substrate surface, wherein the first precursor material comprises a first plurality of inorganic components and a plurality of organic constituents, wherein the first plurality of inorganic components includes at least one eutectic mixture.

Henricks teaches several methods of coating and drawing metal and compositions including integral organic acid coatings, see col. 8, lines 3-35, and methods for coating a fixed integral film with a binder through which is distributed various meltable pigments, see col. 8, lines 47-49. However, Henricks does not teach applying a paste. Moreover, Henricks does not suggest or disclose a paste that includes a first precursor material that comprises a first plurality of inorganic components and a plurality of organic constituents, wherein the first plurality of inorganic components includes at least one eutectic mixture, as recited in claims 10 and 22. Although Henricks mentions that the organic iron coating forms additional low melting eutectic with any residual ferrous oxide or carbonate, the eutectic is not initially present in the organic acid material used to make the organic iron coating. Additionally, Henricks teaches against the inclusion of eutectics on the coating stating that it is preferable to rinse the integral organic iron coating in hot aqueous solution of an alkaline sulfide borax, or disodium phosphate to both

imbibe fusible flux salts and to form fusible iron salts and fusible sodium salts by oil exchange.
See col. 8, lines 27-35.

Accordingly, as Henricks does not teach each and every element of claims 10 and 22, and hence of claim 14 that depends from claim 10, the Applicants respectfully request withdrawal of these rejections.

Rejections Under 35 U.S.C. § 103

Claims 2, 3, 6-24 are rejected under 35 U.S.C. § 103 as allegedly being unpatentable over McDonald in view of Henricks. This rejection is respectfully traversed.

Claims 2 and 3 depend from claim 1, claims 11-18 depend from claim 10, claims 20 and 21 depend from claim 19, and claims 23 and 24 depend from claim 22.

As mentioned above, claim 1 has been amended and now recites, *inter alia*, applying a paste to a surface of a substrate, wherein the paste comprises a precursor material comprising at least an organic component and at least an inorganic bonding component, and the inorganic bonding component comprising a eutectic mixture. Claim 10 has been amended and recites, *inter alia*, applying a paste comprising a precursor material to a substrate surface, the precursor material comprising a plurality of inorganic components and an organic polymer binder, and the plurality of inorganic components including at least one bonding component comprising a eutectic mixture. Claim 19 has been amended and recites, *inter alia*, providing a paste comprising precursor material, wherein the precursor material comprises a plurality of inorganic components, a polymer binder, and a solvent, the plurality of inorganic components includes at least one bonding component, at least one wear-resistant component, and at least one friction-lowering component, and the at least one bonding component comprises a eutectic mixture and applying the paste to a surface. Claim 22 has also been amended and recites, *inter alia*, applying a paste comprising a first precursor material to a substrate surface, wherein the first precursor material comprises a first plurality of inorganic components and a plurality of organic constituents, wherein the first plurality of inorganic components includes at least one eutectic mixture.

Examiner is well aware of the three basic criteria necessary to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success, and third, the prior art reference or references must teach or suggest all the claim limitations. The teaching or suggestion to make the combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. In *Re Vaeck*, 947 Fed. 2d 488, 20 USPQ 2d, 1438 (Fed. Cir. 1991). However, as discussed previously, neither McDonald nor Henricks teaches or suggests applying a paste. Moreover, neither McDonald nor Henricks suggest or disclose a paste that includes a first precursor material that comprises a first plurality of inorganic components and a plurality of organic constituents, wherein the first plurality of inorganic components includes at least one eutectic mixture.

Accordingly, as McDonald and Henricks do not teach each and every element of claims 1, 10, 19, and 22, and hence the claims that depend therefrom (e.g., claims 2, 3, 6-9, 11-18, and 20-24), the Applicants respectfully request withdrawal of these rejections.

Conclusion

Based on the above, independent Claims 1, 10, 19, and 22 are patentable over the citations of record. The dependent claims are also deemed patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

None of the other art of record is understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

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